

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P229804

Luminaire Tested: **24RLN-LD5-74-RDP-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229804
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-74-RDP-UNV-L840-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6163.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

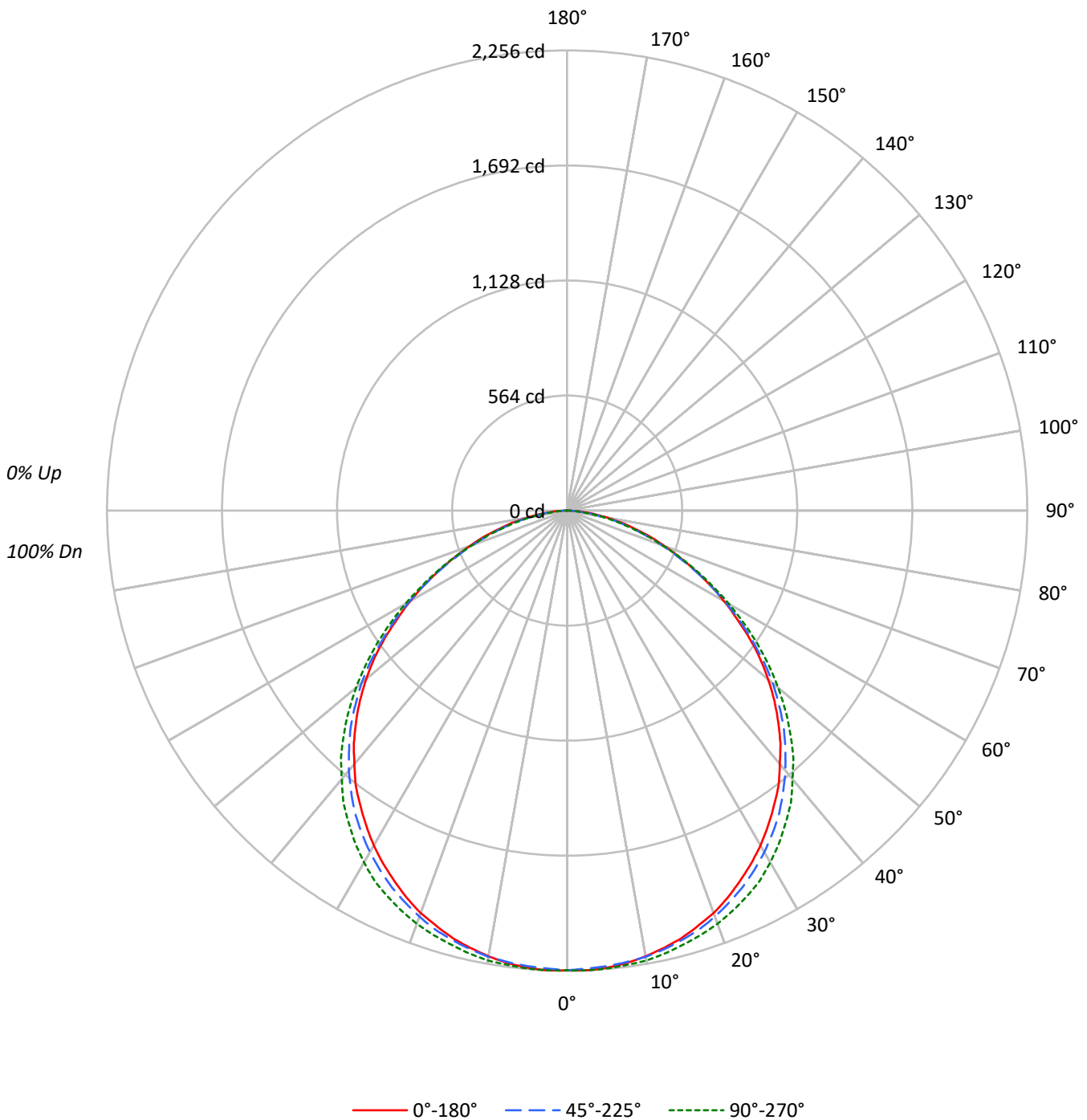
Input Watts (W): 61.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3452	3452	3452
5°	3458	3447	3465
10°	3451	3454	3484
15°	3440	3455	3492
20°	3422	3453	3514
25°	3386	3442	3525
30°	3353	3420	3523
35°	3305	3388	3493
40°	3244	3328	3436
45°	3170	3251	3353
50°	3064	3137	3220
55°	2916	2953	3040
60°	2721	2736	2808
65°	2500	2483	2542
70°	2272	2209	2220
75°	2020	1909	1896
80°	1753	1567	1526
85°	1438	1109	863



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.7	3.5
10°-20°	616.2	10.0
20°-30°	940.6	15.3
30°-40°	1134.0	18.4
40°-50°	1156.4	18.8
50°-60°	989.6	16.1
60°-70°	681.7	11.1
70°-80°	349.5	5.7
80°-90°	81.3	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1770.5	28.7
0°-40°	2904.5	47.1
0°-60°	5050.5	81.9
0°-90°	6163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6163.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2254	2254	2254	2254	2254	
5°	2249	2244	2242	2249	2254	214
15°	2170	2167	2179	2195	2202	612
25°	2004	2011	2036	2072	2086	924
35°	1768	1774	1812	1852	1868	1106
45°	1464	1466	1501	1538	1548	1128
55°	1092	1085	1106	1129	1139	974
65°	690	673	685	690	701	685
75°	341	327	323	323	320	368
85°	82	72	63	56	49	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2253.8	2253.8	2253.8	2253.8	2253.8
2.5°	2256.2	2251.5	2246.8	2251.5	2256.2
5°	2249.2	2244.5	2242.1	2249.2	2253.8
7.5°	2237.5	2232.8	2232.8	2242.1	2246.8
10°	2218.8	2216.4	2221.1	2230.5	2239.8
12.5°	2195.4	2195.4	2202.4	2214.1	2223.4
15°	2169.7	2167.3	2179.0	2195.4	2202.4
17.5°	2134.6	2136.9	2153.3	2172.0	2181.4
20°	2099.5	2101.9	2118.2	2143.9	2155.6
22.5°	2055.1	2059.8	2078.5	2111.2	2122.9
25°	2003.7	2010.7	2036.4	2071.5	2085.5
27.5°	1952.2	1959.2	1987.3	2027.0	2045.8
30°	1896.1	1905.5	1933.5	1975.6	1992.0
32.5°	1833.0	1840.0	1875.1	1917.2	1933.5
35°	1767.5	1774.5	1812.0	1851.7	1868.1
37.5°	1702.1	1702.1	1739.5	1786.2	1802.6
40°	1622.6	1624.9	1664.7	1709.1	1718.4
42.5°	1547.8	1547.8	1582.8	1624.9	1641.3
45°	1463.6	1465.9	1501.0	1538.4	1547.8
47.5°	1377.1	1377.1	1407.5	1442.5	1451.9
50°	1285.9	1281.2	1316.3	1344.4	1351.4
52.5°	1192.4	1185.4	1213.4	1236.8	1246.2
55°	1091.8	1084.8	1105.9	1129.3	1138.6
57.5°	986.6	977.3	1000.7	1021.7	1026.4
60°	888.4	874.4	893.1	904.8	916.5
62.5°	790.2	773.9	787.9	794.9	804.3
65°	689.7	673.3	685.0	689.7	701.4
67.5°	593.9	582.2	584.5	591.5	596.2
70°	507.3	493.3	493.3	493.3	495.7
72.5°	427.9	406.8	404.5	406.8	406.8
75°	341.3	327.3	322.6	322.6	320.3
77.5°	273.5	254.8	252.5	247.8	243.2
80°	198.7	182.4	177.7	175.4	173.0
82.5°	137.9	123.9	119.2	114.6	107.5
85°	81.8	72.5	63.1	56.1	49.1
87.5°	30.4	28.1	23.4	21.0	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)